Assessment of Quality of Life in Patients with Advanced Breast Cancer in Clinical Practice: A Real-World Multi-Country Survey

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Introduction

• In recent years, the quality of life (QoL) of patients has been recognized as a key factor influencing treatment decisions in advanced breast cancer (ABC)\(^1\)-\(^3\)

• QoL discussions between the healthcare professional (HCP) and the patient are important to evaluate the risk/benefit ratio between drug efficacy and toxicity while making treatment decisions

• While advances in therapies that improve efficacy and maintain or improve QoL in patients with ABC have been made, real-world evidence of how QoL is evaluated in clinical practice is lacking\(^4\)

• The objective of this global survey was to gain real-world insight and examine the differences between the perspectives of patients and HCPs on QoL discussions in a clinical setting during the treatment of patients with ABC
Methods (1 of 2)

- This global survey was designed by a steering committee of oncologists and patients with ABC and was approved by an ethics committee for deployment among patients and HCPs.
- Data were collected between July 2020 and May 2021, via a cross-sectional online survey of HCPs (oncologists and oncology nurses) and patients with HR+, HER2– ABC in seven countries.
- Recruitment of HCPs was done through a third party; the HCPs were surveyed on the management of ABC, including the importance of QoL and how it is assessed in clinical practice.
- Recruitment of patients was done through HCPs and advocacy groups; the patients were surveyed on the importance of their QoL and the frequency of QoL discussions with HCPs while undergoing treatment for ABC.

ABC, advanced breast cancer; HCPs, healthcare professionals; HER2–, human epidermal growth factor receptor-2–negative; HR+, hormone receptor–positive; QoL, quality of life.
Methods (2 of 2)

• Inclusion criteria:
  – For oncologists, a minimum caseload of 5 patients with HR+, HER2– ABC (in last 6 months) and responsibility for treatment decisions
  – For oncology nurses, a minimum patient contact time of 50% and regular patient education about their ABC and QoL
  – For patients, aged 18 to 75 years with HR+, HER2– ABC diagnosed in the last 5 years; not currently part of a clinical trial; currently taking an aromatase inhibitor/selective estrogen receptor modulator or selective estrogen receptor degrader/cyclin-dependent kinase 4/6 inhibitor

• Patients were asked to think about overall QoL in the context of their current experience of living with and receiving treatment for BC, as well as their physical, mental, emotional, and social well-being

• All survey observations were assessed using a 4-point Likert scale, and data were analyzed descriptively
Results (1 of 11)
HCP Participant Characteristics

- A total of 502 HCPs participated in the survey; 277 oncologists and 225 oncology nurses
- Most HCPs were practicing in a university hospital (31%), private hospital (25%), or a community setting (24%)
- Participants were from 7 different countries (Figure 1)
Results (2 of 11)
Patient Participant Characteristics

- A total of 467 patients with ABC participated; 221 patients reported locally advanced BC and 229 metastatic BC, while 17 patients did not know their BC stage.
- The mean age of patients was 49.6 years (range, 27-75 years); 99% were female.
- Premenopausal patients accounted for 62% of participants, while 35% were postmenopausal.
- Patients were also from 7 different countries (Figure 2).

![Figure 2. Distribution of survey participation among patients](image)
Results (3 of 11)

Disconnect: More HCPs than patients reported discussions about QoL at follow-ups

- HCPs (88% of oncologists and 96% of nurses) responded that they frequently discuss QoL with their patients with ABC at follow-up appointments (Figure 3A)
- Conversely, 34% and 56% of patients reported that their oncologist and nurses, respectively, never ask about QoL at follow-up appointments (Figure 3B)

Figure 3. HCP (A) and patient (B) responses regarding QoL discussions at follow-up

ABC, advanced breast cancer; HCP(s), healthcare professional(s); QoL, quality of life.
Results (4 of 11)

Disconnect: Oncologists responded that QoL was more important with each subsequent line of therapy, while patients felt the opposite

- The percentage of oncologists who reported that QoL was very important in making treatment decisions increased with each line of therapy (Figure 4)

Figure 4. Oncologist responses regarding the importance of QoL for patients receiving different lines of therapies

1L, first-line; 2L, second-line; 3L, third-line; 4L, fourth-line; QoL, quality of life.
Results (5 of 11)

Disconnect: Oncologists responded that QoL was more important with each subsequent line of therapy, while patients felt the opposite

- Fewer patients completely agreed that their QoL was an important factor when managing treatment decisions with each subsequent line of therapy (Figure 5)

Figure 5. Patient responses at different line of therapies regarding the importance of QoL

“*My QoL is an important factor that should be considered when making treatment/management decisions related to my ABC*”

<table>
<thead>
<tr>
<th>Line of Therapy</th>
<th>Do not agree</th>
<th>Slightly agree</th>
<th>Moderately agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients (n=467)</td>
<td>19%</td>
<td>28%</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>1L (n=142)</td>
<td>4%</td>
<td>73%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2L (n=116)</td>
<td>25%</td>
<td>45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3L or later (n=209)</td>
<td>26%</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1L, first-line; 2L, second-line; 3L, third-line; ABC, advanced breast cancer; QoL, quality of life.
Results (6 of 11)

Disconnect: Oncologists responded that QoL was more important with each subsequent line of therapy, while patients felt the opposite

- While oncologists responded that QoL is more important in later lines, patients in later lines were more likely to report never being asked about their QoL at follow-ups (Figure 6)

Figure 6. Patient responses regarding QoL discussions with oncologists during follow-up in their current line of therapy

QoL, quality of life.
Results (7 of 11)

Discovery: Patients may not discuss side effects with HCPs if they are not asked or out of concern their treatment may be changed

- Patients are most likely to speak about their side effects to their oncologist. They are least likely to discuss a decrease in sexual interest, anxiety, or insomnia with their HCPs (*Table 1*)

*Table 1. Whom patients speak to regarding side effects*

<table>
<thead>
<tr>
<th>Side effects, %</th>
<th>Oncologist</th>
<th>PCP</th>
<th>Nurse</th>
<th>Other</th>
<th>Do not discuss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue (n=281)</td>
<td>77</td>
<td>34</td>
<td>33</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Pain (n=243)</td>
<td>72</td>
<td>31</td>
<td>32</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Decrease in sexual interest (n=223)</td>
<td>46</td>
<td>26</td>
<td>23</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>Hot flashes (n=221)</td>
<td>66</td>
<td>37</td>
<td>27</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Insomnia (n=213)</td>
<td>57</td>
<td>37</td>
<td>31</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Diarrhea (n=179)</td>
<td>57</td>
<td>36</td>
<td>35</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Loss of appetite (n=178)</td>
<td>59</td>
<td>35</td>
<td>31</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Anxiety (n=178)</td>
<td>57</td>
<td>33</td>
<td>24</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

HCPs, healthcare professionals; PCP, primary care physician.
Discovery: Patients may not discuss side effects with HCPs if they are not asked or out of concern their treatment may be changed

- However, patients were most likely to not report side effects to HCPs if they were not directly asked about them (40%), were not impacted daily (37%), or they didn’t want to potentially change a treatment that is working (28%; Figure 7)

Figure 7. Patient responses regarding reasons for not discussing side effects with their HCPs

“I do not report my side effects because…”

- I am not asked directly about them: 45% of do not agree, 16% of slightly agree, 25% of moderately agree, 15% of completely agree
- They do not impact my daily routine: 38% of do not agree, 25% of slightly agree, 27% of moderately agree, 10% of completely agree
- My treatment is working, and I don’t want my doctor to change it: 52% of do not agree, 20% of slightly agree, 21% of moderately agree, 7% of completely agree
- I do not think they are related to my treatment: 65% of do not agree, 19% of slightly agree, 10% of completely agree
Results (9 of 11)

Discovery: QoL is not routinely formally assessed, as HCPs reported challenges with accuracy, specificity, and accessibility

- Of HCPs who reported asking patients about QoL, most used their own questions, with only 11% of oncologists and 30% of nurses reporting that they used formal QoL questionnaires (Figure 8)

Figure 8. Oncologist and oncology nurse responses regarding how they asked about patient QoL

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\(^a\)QoL questionnaires included paper and pencil or electronic. HCPs, healthcare professionals; QoL, quality of life.
Results (10 of 11)

Discovery: QoL is not routinely formally assessed, as HCPs reported challenges with accuracy, specificity, and accessibility

- Routine assessments of QoL may be limited by time, availability, lack of customization, and access to integration with electronic health record systems (Figure 9)

Figure 9. HCP responses to statements about routine assessment of QoL

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree</th>
<th>Slightly agree</th>
<th>Moderately agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to provide therapeutic intervention to address patient QoL concerns</td>
<td>28%</td>
<td>47%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>I use my own tools to measure QoL that I have developed based on my experience</td>
<td>18%</td>
<td>38%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>I have enough time to discuss QoL with patients</td>
<td>10%</td>
<td>40%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>I have QoL tools available to help me assess QoL in my practice</td>
<td>21%</td>
<td>34%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Routine assessment of QoL is limited in my practice</td>
<td>28%</td>
<td>29%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Available QoL tools are specific enough for me to customize for each patient</td>
<td>30%</td>
<td>26%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>I have access to QoL tools integrated with electronic health record systems</td>
<td>35%</td>
<td>30%</td>
<td>23%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 9a: The first question of this assessment was asked to oncologists only, while the rest were posed to both oncologists and oncology nurses. HCP(s), healthcare professional(s); QoL, quality of life.
Results (11 of 11)

Discovery: QoL is not routinely formally assessed, as HCPs reported challenges with accuracy, specificity, and accessibility

- Familiarity with available QoL tools was poor among HCPs; of those familiar with the QoL tools used in ABC clinical trials, only 10% agreed that these tools were able to accurately reflect patient QoL (Figure 10)

Figure 10. Oncologist (A) and all HCP (B) responses about QoL assessment tools used in clinical trials

ABC, advanced breast cancer; HCP(s), healthcare professional(s); QoL, quality of life.
Conclusions

• This real-world, multi-country survey found several disconnects between patients with ABC and HCPs (oncologists and oncology nurses) treating those with ABC regarding the relevance of discussions around QoL
  – Fewer patients were able to remember having discussions about their QoL than reported by HCPs
  – Patients on later lines of therapy felt QoL was less important and reported less-frequent QoL discussions. HCPs felt QoL discussions were more important in making treatment decisions as lines of therapy increased
• Formal QoL assessment tools were not regularly used by HCPs, and those familiar with them felt that the currently available tools were not specific to ABC
  – QoL of patients with ABC should be formally assessed regularly with ABC-specific QoL assessment tools; this would allow HCPs to address patient issues around QoL through focused discussions to help inform treatment decisions
• To establish the clinical value of QoL, an assessment tool should be quick and easy to use, electronically available for completion at home or in waiting rooms, easy to score, and validated for repeated measures, with clinically meaningful thresholds and change scores available

ABC, advanced breast cancer; HCPs, healthcare professionals; QoL, quality of life.
References

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